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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,633	02/14/2002	Paul C. Sutton	2970	1701

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EXAMINER

TRUONG, LECHI

ART UNIT

PAPER NUMBER

2194

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/075,633	SUTTON ET AL.	
	Examiner	Art Unit	
	LeChi Truong	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 18 July 2006.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-48 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-48 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

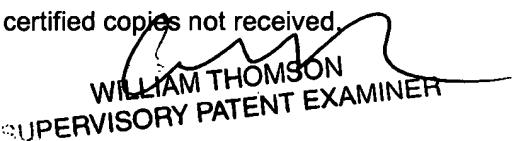
Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


 WILLIAM THOMSON
 SUPERVISORY PATENT EXAMINER

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application

6) Other: _____

DETAILED ACTION

1. Claims 1-48 are presented for the examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6-8, 10-13, 17, 19, 20-21, 23-33, 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangipudi (US. Paten 6,728,748 B1) in view of Sashino et al (US. Patent 6,701,323 B2) and further in view of Kambara et al (US 2002/0116437 A1).

As to claim 1, Mangipudi teaches the invention substantially as claimed including: a controller (routing host, e.g in the form of a TPC router, col 4, ln 36-40/ ln 51-56/ col 7, ln 55-60/ Fig. 2), a plurality of unique sets (three groups may be defined called Gold, Silver and Bronze, col 7, ln 30-33/ Grouping service hosts into clusters, along with recognizing and categorizing traffic based upon their domain of origin, URL, transactions, service or protocol, Source or Destination IP address... user name, col 7, ln 35-40), at least one device(five devices, col 7, ln 30-33), each set comprising a grouping of at least one device a grouping of at least one computing device(col 7, ln 35-40), maintaining a plurality sets at controller, a grouping of at least least one computing device (col 7, ln 13-20/ ln 55-60/ fig. 2/3), a selection(a predetermine

criteria, col 9, ln 35-40/a selected load balancing, col 10, ln 40-50/ the police engine, col 9, ln 65-67 to col 10, ln 1-5), providing at the controller a selection corresponding to at least one computing device (col 9, ln 35-40/ ln 65-67 to col 10, ln 1-5/ ln 40-45).

Mangipudi does not explicitly teach providing at the controller a job corresponding to at least one operation to perform on the selection, sending a message, the message instructing the computing device that receives the message to execute the job, at the controller storing results of the job from each computing device. However, Sashino teaches providing at the controller a job corresponding to at least one operation to perform on the selection (the server machine selector 212-a receive a request message 700 from the receive port 211-a and selects its local server-run computer that performs the task of execution of the request method, col 5, ln 49-50/ col 10, ln 59-64), sending a message (issuing a request message 700 in which a method name 730 is specified, the requirement for the server-run computer 200-1 or 220-b to execute the method, col 8, ln 6-10), the message instructing the computing device that receives the message to execute the job (a method name 730 form the request message 700 which is presented to identify the object to be invoked and the method to be executed, col 3, ln 50-55), at control storing result after execution of the job from each computing device(the object writing section 314 receives the object data identifier, the object data fixed after the method execution... the data writing section 315 saves the object data fixed after the method execution in the object data 340, col 6, ln 49-54/ col 6, ln 15-21/ an HTML-format file which contains result of the method execution, col 15, ln 41-43/ The result of the method execution is marked up into an HTML format file, col 17, ln 20-24/receives the result of method execution, col 3, ln 10-15).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Mangipudi and Sashino because Sashino's sending a message, the message instructing the computing device that receives the message to execute the job, at the controller storing results of the job from each computing device would improve the efficiency of Mangipudi and Sashino's systems by allowing the load balancing feature with easy addition and expansion of objects to run on a sever-run computer.

Mangipudi, Sashino do not explicitly teach each set differentiated by operational capability. However, Kambara teaches each set differentiated by operational capability (the main server which operates specific tasks such as setting, monitoring and the like of the node and the sub server which operate back-up operation, para [0004], In 4-7/ classifies each node group of the cluster system into a main server candidate node group capable of operating the specific task, a sub-server candidate node group capable of operating the back-up operation of the specific task and an out of candidate node group excluded fro the executed for the specific task, para[0005], In 5-10/ the main server candidate node group 28 can be said as a node group which has assets necessary for operating the back-up task of the cluster management task. The sub-server candidate node group 30 is a stand by system node group capable of operating the back-up task of the cluster management task, para [0025], In 47-59).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Mangipudi, Sashino and Kambara because Kambara's set differentiated by operational capability would improve the flexibility of Mangipudi, Sashino's systems by electing a new main server or sub-server to take over specific task so as to improve the availability of the system.

As to claim 2, Sashino teaches providing data corresponding to at least one set of computing device (col 3, ln 50-58).

As to claim 3, Sashino teaches a script to run on the selection (col 15, ln 22-28).

As to claim 4, Sashino teaches binary program (col 5, ln 1-5).

As to claim 6, Sashino teaches executing the job in response to the message (col 3, ln 55-59).

As to claims 7 and 8, they are apparatus claims of claims 3 and 4; therefore, they are rejected for the same reasons as claims 3 and 4 above.

As to claim 10, Sahino teaches the controller discovery information indicating that a node-computing device is operational so as to be controlled by the controller (col 5, ln 40-45).

As to claim 11, Sahino teaches recognizing the node-computing device is already controlled by the controller (if there is not room, col 5, ln 40-45).

As to claim 12, Sahino teaches recognizing that the node computing the controller does not control device, and controlling the node-computing device (col 6, ln 20-24).

As to claim 13, Sahino teaches adding information identifying the node-computing device (col 6, ln 38-40), a data store maintained by the controller (col 4, ln 56-60).

As to claim 17, Mangipudi teaches a controller (routing host, e.g. in the form of a TPC router, col 4, ln 36-40/ ln 51-56/ col 7, ln 55-60/ Fig. 2), a plurality of unique sets (three groups may be defined called Gold, Silver and Bronze, col 7, ln 30-33/ Grouping service hosts into clusters, along with recognizing and categorizing traffic based upon their domain of origin, URL, transactions, service or protocol, Source or Destination IP address... user name, col 7, ln 35-40), schema (selectable load distribution, col 4, ln 53-56), at least one set object each set object

identifying a group of at least one computing node(Clustering service hosts into groups based on service level metrics, col 7, ln 52-54/ defining a threshold setting an acceptable range for each a plurality of service level metrics and reconfiguring said at least said first cluster and second cluster in response to a determination that at least one of said plurality of selected service level metrics, col 16, ln 20-25/ col 4, ln 53-56), each computing node group together via a set object (col 7, ln 50-55) and Sashino teaches each device object identifying a computing node (the server machine identifier, col 8, ln 36-43), schema (the load table 214, col 5, ln 65-67 to col 6, ln 1-3/ the data object table 340, col 7, ln 59-65/ the load table 600, col 8, ln 36-41/ load balancing schema, col 11, ln 5-8), a job corresponding to at least one operation to be executed (the server machine selector 212-a receive a request message 700 from the receive port 211-a and selects its local server-run computer that performs the task of execution of the request method, col 5, ln 49-50/ col 10, ln 59-64).

As to claims 19, 20, Mangipudi teaches adding / remove a device to a set (col 14, ln 21-30).

As to claim 21, Sashino teaches the set object include method for running a job on the set (col 7, ln 37-43/ col 11, ln 42-45).

As to claim 23, Sashino teaches a job invocation object that is created wherein when the job is executed (col 4, ln 25-32/ col 8, ln 9-15).

As to claim 24, Sashino teaches an alerts object for communicating information from computing node the to the controller (col 4, ln 25-32).

As to claim 25, it is an apparatus claim of claim 1; therefore, it is rejected for the same reasons as claim 1 above. In additional, Sashino teaches agent software (the object invocation unit, col 3, ln 55-59/ Fig. 1), a transport (col 3, ln 20-27) and Sashino teaches each device object identifying a computing node (col 4, ln 40-42), each set object identifying a group (col 2, ln 50-55), each computing node group together via a set object (col 4, ln 50-56), schema (the load table 214, col 5, ln 65-67 to col 6, ln 1-3/ the data object table 340, col 7, ln 59-65/ the load table 600, col 8, ln 36-41/ load balancing schema, col 11, ln 5-8), a job corresponding to at least one operation to be executed (the server machine selector 212-a receive a request message 700 from the receive port 211-a and selects its local server-run computer that performs the task of execution of the request method, col 5, ln 49-50/ col 10, ln 59-64).

As to claim 26, Kambara teaches interface configured to provide access to information in the data store (col 12, ln 16-21).

As to claim 27, Sashino teaches an execution engine at the node computer, the agent software communicating with the execution engine to perform the at least one-operation corresponding to the job (col 3, ln 53-59).

As to claims 28-29, they are apparatus claims of claims 3, 4; therefore, they are rejected for the same reasons as claims 3, 4 above.

As to claims 30-33, Sashino teaches special operation, a reboot operation; suspend operation, shutdown operation (col 3, ln 50-55/ Fig. 6).

As to claims 34-35, they are apparatus claims of claims 10, 14; therefore, they are rejected for the same reasons as claims 10, 14 above

3. Claims 5, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangipudi (US. Paten 6,728,748 B1) in view of Sashino et al (US. Patent 6,701,323 B2) and further in view of Kambara et al (US 2002/0116437 A1), as applied to claim 1 above, and further in view of Toga (US. Patent 5,987,504).

As to claim 5, Mangipudi, Sashino and Kambara do not explicitly teach a network address. However, Toga teaches a network address (user@company.com sz>1000, fig. 4).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Mangipudi, Sashino, Kambara and Toga because Toga's network address would improve the use of Mangipudi, Sashino, Kambara's systems by delivering of data or information between a server and client user that overcomes the aforementioned problems.

As to claim 9, Toga teaches retrieving the program based on a network address in the message (col 3, ln 64-68).

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mangipudi (US. Paten 6,728,748 B1) in view of Sashino et al (US. Patent 6,701,323 B2), and further in view of Kambara et al (US 2002/0116437 A1), as applied to claim 1 above, and further in view of Choquier et al (US. Patent 5,774,668).

As to claim 14, Mangipudi, Sashino and Kambara do not teach automatically configuring the node-computing device based on receiving the discovery information. However, Choquier

teaches configuring the node-computing device based on receiving the discovery information (If the average load is greater than the predetermined maximum, a server 120 will be added to the service group, col 24, ln 25-30).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Mangipudi, Sashino, Kambara and Choquier because Choquier's automatically configuring the node computing device based on receiving the discovery information would improve flexibility of Mangipudi, Sashino, Kambara's systems allowing additional servers to be efficiently added to the network.

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mangipudi (U.S. Paten 6,728,748 B1) in view of Sashino et al (U.S. Patent 6,701,323 B2) and further in view of Kambara et al (US 2002/0116437 A1), as applied to claim 1 above, and further in view of Ludwig et al (6,789,105 b2).

As to claim 15, Mangipudi, Sashino and Kambara do not teach collecting the results in storage. However, Ludwig teaches collecting the results in a storage (the resulting information is stored in the conventional file that can late be retrieved, col 28, ln 65-67).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Mangipudi, Sashino, Kambara and Ludwig because Ludwig's collecting the results in storage would increase the use of Mangipudi, Sashino, Kambara's systems by storing and replaying a user's interface actions.

6. Claims **16, 18, 38, 40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangipudi (US. Paten 6,728,748 B1) in view of Sashino et al (US. Patent 6,701,323 B2) and further in view of Kambara et al (US 2002/0116437 A1), as applied to claim 1 above, and further in view of C. Mohan (Exotica: A Project on Advanced Transaction Management and Workflow System).

As to claim 16, Mangipudi, Sashino and Kambara do not teach persisting results.

However, Mohan teaches persisting results (record in stable storage the results, sec: 3.4, ln 8-9).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Mangipudi, Sashino, Kambara and Mohan because Mohan's persisting results would improve the efficiency of Mangipudi, Sashino and Kambara's systems by making communication between client and server more consistent.

As to claim 18, Mangipudi, Sashino and Kambara do not teach job log object. However, Mohan teaches job log object (sec: 3.4, ln 8-9).

As to claim 38, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above. In additional, Mohan teaches logging the result (section: 3.4, ln 8-9).

As to claim 40, Kambara teaches analyzing the result (col 3, ln 1-4).

7. Claim **41** is rejected under 35 U.S.C. 103(a) as being unpatentable over Mangipudi (US. Paten 6,728,748 B1) in view of Sashino et al (US. Patent 6,701,323 B2) and further in view of Kambara et al (US 2002/0116437 A1), as applied to claim 1 above, in view of C. Mohan

(Exotica: A Project on Advanced Transaction Management and Workflow System) and further in view of Perlman et al (US. 5,978,381).

As to claim 41, Mangipudi , Sashino, Kambara and Mohan do not teach the operation failed on a given computing device, requesting that performance of the operation be retried on that computing device. However, Perlman teaches the operation failed on a given computing device, requesting that performance of the operation be retried on that computing device (client devices receiving multicast data streams all suffer from 10 data errors, there will be 10 million retry requests to content sever 210, col 12, ln 59-66).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Mangipudi, Sashino, Kambara, Mohan and Perlman because Perlman's the operation failed on a given computing device, requesting that performance of the operation be retried on that computing device would increase the efficiency of Mangipudi, Kambara, Mohan's systems by providing more efficient correction of sporadic transmission errors.

8. **Claims 42-48 are** rejected under 35 U.S.C. 103(a) as being unpatentable over Rabinovich et al (6,125,394) in view of Mangipudi (US. Paten 6,728,748 B1) and further in view of Kambara et al (US 2002/0116437 A1).

As to claim 42, Rabinovich teaches editing the set to add at least one controlled computing device to the set (col 2, ln 65-67/ col 5, ln 4-7), storing the set (col 4, ln 45-50/ ln 57-

60), at the controller, using the set to control each controlled computing device of the set (col 5, ln 4-8).

Rabinovich does not teach define plurality of sets, a plurality of unique sets. However, Mangipudi teaches the invention substantially as claimed including: define plurality of sets (three groups may be defined called Gold, Silber and Bronze. The Gold groups is comprised of a cluster of five device, col 7, ln 30-32), a plurality of unique sets (three groups may be defined called Gold, Silver and Bronze, col 7, ln 30-33/ Grouping service hosts into clusters, along with recognizing and categorizing traffic based upon their domain of origin, URL, transactions, service or protocol, Source or Destination IP address... user name, col 7, ln 35-40)

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Rabinovich and Mangipudi because Mangipudi's define plurality of unique sets would improve the flexibility of Rabinovich 's system by allowing network level Cos protocols to guarantees the delivery of end to end policy metrics of a policy enabled network.

Rabinovich and Mangipudi do not explicitly teach each set differentiated by operational capability. However, Kambara teaches each set differentiated by operational capability (the main server which operates specific tasks such as setting, monitoring and the like of the node and the sub server which operate back-up operation, para [0004], ln 4-7/ classifies each node group of the cluster system into a main server candidate node group capable of operating the specific task, a sub-server candidate node group capable of operating the back-up operation of the specific task and an out of candidate node group excluded fro the executed for the specific task, para[0005], ln 5-10/ the main server candidate node group 28 can be said as a node group which has assets

necessary for operating the back-up task of the cluster management task. The sub-server candidate node group 30 is a stand by system node group capable of operating the back-up task of the cluster management task, para [0025], ln 47-59).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Rabinovich, Mangipudi and Kambara because Kambara's set differentiated by operational capability would improve the flexibility of Rabinovich, Mangipudi, Kambara's systems by electing a new main server or sub-server to take over specific task so as to improve the availability of the system.

As to claim 43, Rabinovich teaches editing the set to remove at least one controlled computing device from the set (col 5, ln 4-8).

As to claim 44, Rabinovich teaches defining a set comprises, identifying a set object (col 2, ln 54-56).

As to claim 45, Rabinovich teaches calling a method of the set object (col 5, ln 26-29).

As to claim 46, Rabinovich teaches storing the set on a data store accessible to the controller (col 4, ln 40-49).

As to claim 47, Rabinovich selecting the set (col 2, ln 54-58), and instructing the controller to perform an operation to the set (col 4, ln 39-45), the controller communicating with each computing device in the set to request performance of the operation (col 5, ln 26-29).

As to claim 48, Mangipudi do not teach store result (the object writing section 314 receives the object data identifier, the object data fixed after the method execution... the data writing section 315 saves the object data fixed after the method execution in the object data 340, col 6, ln 49-54/ col 6, ln 15-21/ an HTML-format file which contains result of the method

execution, col 15, ln 41-43/ The result of the method execution is marked up into an HTML format file, col 17, ln 20-24/receives the result of method execution, col 3, ln 10-15).

9. Claims 22, 36-37, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mangipudi (US. Paten 6,728,748 B1) in view of Sashino et al (US. Patent 6,701,323 B2), in view of Kambara et al (US 2002/0116437 A1), as applied to claim 1 above, and further in view of Rabinovich et al (US. Patent 6,324,580 B1).

As to claim 22, Mangipudi, Sashino and Kambara do not teach device object includes association to other objects. However, Rabinovich teaches the device object includes association to other objects (col 2, ln 50-53).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Mangipudi, Sashino, Kambara and Rabinovich because Rabinovich's device object includes association to other objects would improve the flexibility of Mangipudi, Sashino and Kambara's systems by allowing a mechanism for handing a resource that has no history because maintaining the history for all resource is too difficult or expensive.

As to claims 36, 37, Rabinovich teaches each node includes a discovery component for automatically providing the discovery information, each node automatically provides the discovery information following a reboot of that node (col 5, ln 40-46).

As to claim 39, Rabinovich teaches arranging the plurality of computing devices into the set (col 6, ln 39-42).

Response to the argument

10. Applicant's arguments filed 07/18/2006 have been considered but are moot in view of the new ground(s) of rejection. Applicant amended the claims. Kambara's reference meets the amended claims.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomson, William can be reached on (571) 272 3718. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

September 27, 2006

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER